

Appl. No. 09/821,953
Attr. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-37 (*Cancelled*)

Claim 38. (*Currently Amended*) A cleaning sheet comprising:

- (a) a macroscopically three-dimensional substrate having a first outward surface and a second outward surface, wherein at least one of said outward surfaces has a macroscopic three dimensional texture, said macroscopic three dimensional texture being defined by peaks and valleys; and
 - (b) a polymeric additive selected from the group consisting of pressure sensitive adhesive, tacky polymer, and mixtures thereof;
- wherein said polymeric additive is incorporated onto said substrate at a level of from about 0.1 g/m² to about 10.0 g/m².

Claim 39. (*Original*) The cleaning sheet of Claim 38, wherein said polymeric additive is incorporated onto said substrate at a level of from about 0.3 g/m² to about 6.0 g/m².

Claim 40. (*Original*) The cleaning sheet of Claim 39, wherein said polymeric additive is incorporated onto said substrate at a level of from about 0.5 g/m² to about 4.0 g/m².

Claim 41. (*Original*) The cleaning sheet of Claim 38, wherein said polymeric additive is a pressure sensitive adhesive comprising:

- (a) an adhesive polymer;
- (b) optionally, a tackifying resin;
- (c) optionally, a plasticizer; and
- (d) optionally, a component selected from the group consisting of diluents, stabilizers, antioxidants, colorants, fillers, and mixtures thereof.

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

Claim 42. (*Original*) The cleaning sheet of Claim 38, wherein said polymeric additive is a tacky polymer selected from the group consisting of: polyisobutylene polymers, alkyl methacrylate polymers, polyalkyl acrylates, and mixtures thereof.

Claim 43. (*Currently Amended*) A cleaning sheet comprising:

(a) a macroscopically three-dimensional substrate having a first outward surface and a second outward surface, wherein at least one of said outward surfaces has a macroscopic three dimensional texture, said macroscopic three dimensional texture being defined by peaks and valleys; and

(b) a pressure sensitive adhesive incorporated onto said substrate, said pressure sensitive adhesive comprising:

- (i) an adhesive polymer;
- (ii) optionally, a tackifying resin;
- (iii) optionally, a plasticizer; and
- (iv) optionally, a component selected from the group consisting of diluents, stabilizers, antioxidants, colorants, fillers, and mixtures thereof;

wherein said pressure sensitive adhesive has an Adhesive Work Value of from about 130 to about 1000.

Claim 44. (*Currently Amended*) The cleaning sheet of Claim 43, wherein said Adhesive Work Value is from about 160 to about 750.

Claim 45. (*Currently Amended*) The cleaning sheet of Claim 44, wherein said Adhesive Work Value is from about 250 to about 650.

Claim 46. (*Original*) The cleaning sheet of Claim 43, wherein said pressure sensitive adhesive has an additional adhesive characteristic selected from the group consisting of:

- (a) a Tack Value of from about 100 to about 500;
- (b) a Cohesive/Adhesive Ratio of from about 0.2 to about 20;
- (c) a Stringiness Value of from about 2.5 to about 12.0; and
- (d) combinations thereof.

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

Claim 47. (*Original*) The cleaning sheet of Claim 46, wherein said pressure sensitive adhesive has a Tack Value of from about 150 to about 400.

Claim 48. (*Cancelled*)

Claim 49. (*Original*) The cleaning sheet of Claim 43, wherein said adhesive polymer is a cross-linked acrylate polymer.

Claim 50. (*Currently Amended*) A cleaning sheet comprising:

(a) a macroscopically three-dimensional substrate having a first outward surface and a second outward surface, wherein at least one of said outward surfaces has a macroscopic three dimensional texture, said macroscopic three dimensional texture being defined by peaks and valleys; and

(b) a tacky polymer;

wherein said tacky polymer has an Adhesive Work Value of from about 50 to about 1000.

Claim 51. (*Original*) The cleaning sheet of Claim 50, wherein said Adhesive Work Value is from about 75 to about 250.

Claim 52. (*Original*) The cleaning sheet of Claim 51, wherein said Adhesive Work Value is from about 100 to about 150.

Claim 53. (*Original*) The cleaning sheet of Claim 50, wherein said tacky polymer has a T_g of from about -150°C to about 0°C .

Claim 54. (*Original*) The cleaning sheet of Claim 50, wherein said tacky polymer has a molecular weight of from about 1000 to about 500,000.

Claim 55. (*Original*) The cleaning sheet of Claim 50, wherein said tacky polymer has an additional adhesive characteristic selected from the group consisting of:

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

- (a) a Tack Value of from about 300 to about 500;
- (b) a Cohesive/Adhesive Ratio of from about 0.2 to about 20;
- (c) a Stringiness Value of from about 0.4 to about 12.0; and
- (d) combinations thereof.

Claim 56. (*Original*) The cleaning sheet of Claim 50, wherein said tacky polymer is selected from the group consisting of polyisobutylene polymers, alkyl methacrylate polymers, polyalkyl acrylates, and mixtures thereof.

Claim 57. (*Original*) The cleaning sheet of Claim 56, wherein said tacky polymer is polyisobutylene polymer.

Claim 58. (*Currently Amended*) A cleaning sheet comprising:

- (a) a macroscopically three-dimensional substrate having a first outward surface and a second outward surface, wherein at least one of said outward surfaces has a macroscopic three dimensional texture, said macroscopic three dimensional texture being defined by peaks and valleys; and
 - (b) a polymeric additive selected from the group consisting of pressure sensitive adhesive, tacky polymer, and mixtures thereof;
- wherein said polymeric additive is incorporated onto said substrate in zones comprising a center zone and two side zones; wherein said side zones are located on each side of said center zone; wherein the level of said polymeric additive in said center zone is from about $[[0]]$ 0.02 g/m² to about 1.5 g/m²; and wherein the level of said polymeric additive in said side zones is from about 0.1 g/m² to about 5.0 g/m².

Claim 59. (*Original*) The cleaning sheet of Claim 58, wherein said polymeric additive is a pressure sensitive adhesive and has an Adhesive Work Value of from about 130 to about 1000.

Claim 60. (*Original*) The cleaning sheet of Claim 58, wherein said polymeric additive is a tacky polymer and has an Adhesive Work Value of from about 50 to about 1000.

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

Claims 61-63 (*Cancelled*)

Claim 64. (*New*) The cleaning sheet of claim 38 wherein said textured outward surface has an Average Height Differential of at least about 0.5 mm.

Claim 65. (*New*) The cleaning sheet of claim 64 wherein said textured outward surface has an Average Height Differential of at least about 1 mm.

Claim 66. (*New*) The cleaning sheet of claim 65 wherein said textured outward surface has an Average Height Differential of at least about 1.5 mm

Claim 67. (*New*) The cleaning sheet of claim 38 wherein said textured outward surface has a Surface Topography Index of from about 0.01 to about 10.

Claim 68. (*New*) The cleaning sheet of claim 67 wherein said textured outward surface has a Surface Topography Index of from about 0.1 to about 5.

Claim 69. (*New*) The cleaning sheet of claim 38 wherein said textured outward surface has an Average Peak to Peak Distance of at least about 1 mm.

Claim 70. (*New*) The cleaning sheet of claim 69 wherein said textured outward surface has an Average Peak to Peak Distance of from about 1 to about 20 mm.

Claim 71. (*New*) The cleaning sheet of claim 38 wherein said substrate comprises at least one layer of a nonwoven material.

Claim 72. (*New*) The cleaning sheet of claim 38 wherein said outward surface having said macroscopic three dimensional texture includes a non-random macroscopic pattern including raised regions and recessed regions.

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

Claim 73. (*New*) The cleaning sheet of claim 72 wherein said outward surface including said non-random macroscopic pattern has an Average Height Differential of at least about 0.2 mm.

Claim 74. (*New*) The cleaning sheet of claim 73 wherein said Average Height Differential is at least about 0.4 mm.

Claim 75. (*New*) The cleaning sheet of claim 74 wherein said Average Height Differential is at least about 0.6 mm.

Claim 76. (*New*) The cleaning sheet of claim 75 wherein said raised regions have a rounded parallelogram shape in the X-Y dimension.

Claim 77. (*New*) The cleaning sheet of claim 72 wherein said recessed regions form a continuous pattern in the X-Y dimension.

Claim 78. (*New*) The cleaning sheet of claim 77 wherein said continuous recessed pattern includes channels having a width from about 0.25 mm to about 10 mm.

Claim 79. (*New*) The cleaning sheet of claim 78 wherein the width of said channels is from about 1 mm to about 8 mm.

Claim 80. (*New*) The cleaning sheet of claim 77 wherein said polymeric additive is applied to said continuous pattern.

Claim 81. (*New*) The cleaning sheet of claim 72 wherein said outward surface including said raised regions and said recessed regions forms a working face of said cleaning sheet.

Claim 82. (*New*) The cleaning sheet of claim 81 wherein said recessed regions of said working face form a continuous pattern in the X-Y dimension.

Appl. No. 09/821,953
Atty. Docket No. 7973MR
Amdt. dated March 26, 2004
Reply to Office Action of January 29, 2004

Claim 83. (New) The cleaning sheet of claim 82 wherein said polymeric additive is applied to said continuous pattern.

Claim 84. (New) The cleaning sheet of claim 83 wherein said textured outward surface has an Average Height Differential of at least about 0.2 mm.

Claim 85. (New) The cleaning sheet of claim 84 wherein said textured outward surface has an Average Height Differential of at least about 0.4 mm.

Claim 86. (New) The cleaning sheet of claim 85 wherein said textured outward surface has an Average Height Differential of at least about 0.6 mm.

Claim 87. (New) The cleaning sheet of claim 86 wherein said substrate comprises at least one layer of a nonwoven material.

Claim 88. (New) The cleaning sheet of claim 81 wherein said cleaning sheet is folded such that said working face faces outwardly.

Claim 89. (New) The cleaning sheet of claim 86 wherein said recessed regions form pockets for trapping large particulates present on a floor surface when said floor surface is wiped with said working face of said cleaning sheet.